SOUTH DAKOTA Ornithologists' Union

Blue-headed Vireo
Brown Co. 10/05//06
Photo: Daniel Streifel

SOUTH DAKOTA BIRD NOTES

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SOUTH DAKOTA ORNITHOLOGISTS' UNION
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STANDING COMMITTEES OF SDOU:

President's Page

One of my main goals as President of SDOU is to obtain new contributors and bring back previous contributors to the SDOU **Online Seasonal Bird Observation Report System.**

Article 1 Section 2 of the SDOU Constitution states, "Its aim shall be to encourage the study of birds in South Dakota and to promote the study of ornithology by more closely uniting the students of this branch of natural science."

One of the most important elements of bird study is to document bird sightings. These documented bird observations allow ornithologists to track avian range expansions and contractions, important breeding areas, long term trend data and many other areas of avian research.

Many times situations arise where people through their own observations will state something such as, "When I was young, I saw Long-billed Curlews *everywhere* and now I only see them in this one spot". When a project arises that would destroy the habitat where this bird was last observed, bureaucracy is not going stop this project on our word alone. They want to see hard scientific data. That's just one example why documenting these sightings is so important.

Presently, there are many years of accessible data on the database. If a student at one of our state universities wants to conduct research on avian species in South Dakota they will have a baseline of historical data.

We are so lucky that we in South Dakota have a database to submit this data. Many states have nothing.

We have over one hundred and fifty members, yet only about twenty consistently enter sightings. I know we can do better as an organization. I especially ask the biologists out there who know how important this data can be to document their sightings!

So, SDOU members don't be surprised if you get a call or e-mail asking you to submit your bird sightings to the SDOU database.

Ricky D. Olson

Fledgling Tracts

Jason Thiele

Birding Sparks

While listening for owls in the early morning hours for a Christmas Bird Count earlier this year, I found myself asking the question, "What is it that gets people like me to get up at 4 a.m. and go out into freezing temperatures to simply try to hear creatures we probably won't even see?" I think most birders can probably think back to moments that really hooked them on the hobby–little "sparks" that got the birding fire burning. Perhaps it was a particular bird seen at a local park, or a walk in the woods with a veteran naturalist who pointed out birds previously overlooked. Overall, I think that most of these sparks fall into a few general categories. I've been attempting to introduce some friends to birding in the last couple of years, with varying degrees of success, and I try to keep these categories in mind as I think of ways to generate an interest in birds. I'm fairly convinced that virtually anyone can be turned into a birder if the right spark can be found. And even if they don't become birders, their appreciation of the natural world will increase, which is even more important.

Pretty birds

Often the birds that get noticed are the ones that are most noticeable. That seems pretty obvious. A big reason why people become interested in watching birds is that many of them are very showy. Anyone with a pulse should "ooh" and "aah" at least a little at the sight of a bright red male Northern Cardinal at a backyard bird feeder. And it's possible that even someone without a pulse would react to the sight of a male Scarlet Tanager, whose "Retina-scorching Red" (I'm trademarking that name before some crayon company does) coloration makes the Northern Cardinal's plumage look like a hobo's garb in comparison. And there are plenty of other eye-catching Aves out there. Who couldn't marvel at the fiery orange throat of a Blackburnian Warbler, or the blazing yellow of an American Goldfinch, or the bright blue of an Indigo Bunting? Others wow with bold patterns, like the referee's outfit of a Black-and-white Warbler or the big white wing patches on a Snow Bunting. Others are much more understated in dress, but stunning nevertheless, like the Northern Pintail and the Cedar Waxwing. And for others, the colors are of little consequence, since the gracefulness of their movements is what really get them noticed–species like the Forster's Tern or the Snowy Egret.

Goofy Birds

While there are some bird species that get attention for their aesthetic appeal, others get noticed because they are just plain weird. To use an analogy, some people buy vehicles to get noticed. The first way to attract attention is to buy something that really stands out because of its bold flashiness, (perhaps a red Corvette, the automobile equivalent of a Scarlet Tanager), or its beautiful lines (like a Jaguar roadster, more like a Tundra Swan on wheels). The other option might be to buy something with a strange shape that looks like nothing else on the road, such as a Volkswagen Beetle or a Humvee. The species that I'm referring to here are the "Bugs" and "Hummers" of the bird world.

Several examples of bizarre birds are found in my favorite bird family, the Scolopacidae, (the sandpipers). The Long-billed Curlew looks like a character in a Dr. Seuss book with its ridiculous proportions. [Actually, the first line of that book almost writes itself: On the

isle of Ishkaderloo, dwells the wondrous Long-billed Curlew…] The American Woodcock (personally, I prefer the colloquial name "timberdoodle") looks like something from another world too, with its long bill and big, beady eyes placed oddly on the side of its head.

It is often the bill that draws attention to a bird. Indeed, two of the birds on my "life list wish list" are actually named for the unusual shape of their bills–the Roseate Spoonbill and the Spoon-billed Sandpiper. Most children have probably learned that a bird's diet can generally be guessed by looking at the shape of its bill, and it's fascinating to examine the various bill types among birds adapted for different diets and lifestyles. Sometimes, however, the best tool for the job isn't always the most elegant contraption. Although an American White Pelican's huge bill with its attached gular pouch allows the bird to gulp fish with ease, it doesn't provide a profile that you're likely to see on a Christmas card anytime soon. Similarly, a flamingo's bent bill is ideal for straining invertebrates out of the water, but it doesn't make a flamingo look good as a lawn decoration (seriously, who came up with the idea of lawn flamingos?).

It's not only the bill that can make a bird stand out from the crowd (flock?). Take the Burrowing Owl, which has unusually long legs compared to other owls–all the better for chasing bugs around on the ground. Then there are the relatively short legs and webbed feet of a dabbling duck, which make it a good swimmer but endearingly awkward on land. Vultures of many varieties have bald heads, which allows them to plunge their heads into putrid flesh without fouling feathers that they can't preen. The list of amazing (and odd) adaptations goes on and on.

Birds of unusual size

I currently live in a hotspot for Bald Eagles. It is a very rare day that I don't see at least a few of them, and during spring and fall migration, I may see hundreds fly overhead in a single day. Still, the Bald Eagle is a bird that always holds my attention when I spot one. In addition, when I tell people that enjoy birding, a frequent response that I get is something like, "Oh, neat! I just saw a Bald Eagle last week!" There are several reasons why the Bald Eagle is so widely revered. It certainly benefits from being a national symbol; also, many people can remember a time when seeing a Bald Eagle was a truly rare event. However, I think that people are most drawn to Bald Eagles because of their impressive size. I remember seeing them occasionally as a kid and being amazed by the huge wingspan as they soared overhead.

Another bird that is a favorite of many is the Pileated Woodpecker. Almost everyone knows what a woodpecker looks like, but few people expect to see one that is so massive. I distinctly remember the first one I ever saw–its appearance was almost prehistoric. It really makes me wonder what seeing an Ivory-billed Woodpecker must have been like.

It's not just the big birds that get the attention either. I've been to a number of live bird shows in a handful of states, and one bird that never fails to generate a vocal reaction from the audience is the Eastern Screech Owl. As the presenter pulls the owl out of its box, the crowd usually gives a collective "Ahhhhhh!" punctuated by a couple people saying "He's so cute!" and an inevitable cry of "It's a baby owl!" There's just something about a tiny animal that gets people's attention.

Of course, the tiniest of the tiny are the hummingbirds, another group of birds that appeal to birders and non-birders alike. Yes, hummingbirds have spectacular coloration and a hyperactive lifestyle that add to their charm, but I think that for most people, hummingbirds are most fascinating because of their diminutive size. I had the privilege of watching a hummingbird bander at work a few years ago, and for me and the handful of other folks observing, it was hard to fathom how the little feathered jewel in his hand was capable of flying non-stop across the Gulf of Mexico year after year.

Birds in big numbers

Some of the greatest wonders in the natural world are gatherings of large groups of birds. Often big numbers can be seen during migration, and this can provide a spectacular show and the perfect opportunity to introduce someone to birding. I'm sure that for many birders in South Dakota and other states along the Central Flyway, one of the biggest highlights of the year is the arrival of Snow Geese in the spring. I've seen this event quite a few times, and it still impresses me. It's hard to describe a big spring Snow Goose migration to someone who has never witnessed one. Only a few weeks ago, I actually had to show photos of Snow Geese flocks in eastern South Dakota to a couple of people who I sensed didn't believe me when I told them how many I would see during migration.

As a native Nebraskan, I certainly have a fondness for Sandhill Cranes and the awesome spectacle of seeing (and hearing!) tens of thousands of these long-legged, long-necked, long-billed birds descend on the Platte River in the early spring. I'm also hooked on hawk watching, especially in the last year or so, since my current place of employment is along a major migration route. On some days, I've had the fortune to watch dozens, or even hundreds, of Broad-winged Hawks, Sharp-shinned Hawks, Red-tailed Hawks, and other raptors fly overhead in the spring and fall. As a result, one of the items recently added to my birding bucket list is a trip to Veracruz, Mexico to watch countless Swainson's Hawks, Broad-winged Hawks, Turkey Vultures, and other migrant raptors pass by.

There are abundant opportunities to see impressive congregations of birds in other seasons as well. Colonial breeding species provide reliable viewing opportunities during the summer months that can impress almost anyone. I personally enjoy watching the comings and goings of Cliff Swallows from their mud nests, and Purple Martin houses are generally easy to find in many areas. Colonial water birds like herons, egrets, and cormorants can also give a good show.

Birds of many kinds

Just recently, I was telling a friend about the Christmas Bird Counts that I was involved in. He asked me how many different bird species were usually seen on a CBC. When I told him that 40-45 was about the average for this area, with over 50 possible if conditions were ideal, he was amazed. I did explain that it takes some work to find that many species in the winter, but that during a good spring migration day, he could expect to see that many species just on his farm, and that over 100 could be found within a half-hour's drive.

While it would perhaps not be advisable to take potential birders out on a "Big Day" attempt for fear of overwhelming them with names, I think that most people would be interested in learning about the array of species that can be found in their own neighborhoods. Speaking for myself, I went from a person who just had a general interest in birds and other wildlife to a pretty serious birder once I realized how simple it could be to find birds. I think I was under the impression that you had to really travel in order to see a big variety of interesting birds. However, during my summer job out of high school, I would often spend long days driving a tractor at speeds of just a few miles per hour, and since there was no radio or any other form of distraction, I observed the birds and kept track of how many species I saw. After a time, I'd challenge myself to see more species than I'd seen the day before. And I really started to learn the habitat requirements of each species. I was becoming a birder.

Birds with talons

I've worked with a variety of species in my young ornithology career, but when I talk with people about my work, the birds that interest them the most often seem to be the raptors.

While it is true that there are plenty of people out there who don't care much for raptors at all–predators in general seem to be quite polarizing critters–it cannot be denied that people tend to notice raptors, even when they generally ignore other birds.

This winter has brought an impressive Snowy Owl irruption to the eastern US, and this event has undoubtedly gotten some people to catch at least an acute case of the birding flu. I've seen first-hand several people who probably never stopped for a moment to think much about the birds they see that have risked getting stuck in a snow drift to pull over and look at a Snowy Owl. Why? Well, it could be that they are *Harry Potter* fans (I'm not, but I've been told that the title character has a pet Snowy Owl). Or, more likely, when a person sees a Snowy Owl, or almost any other raptor, he/she has to think, "Wow, if could be a bird, I would love to be one of those. Superb eyesight. Graceful, yet powerful. At the top of the food chain." Sure, we humans have large brains, but I think that many of us would gladly trade a few IQ points for a set of talons and pair of "eagle eyes," at least for a day.

Bird behaviors

One of the unfortunate things about birding is that sometimes birds can turn into mere checkmarks on a list or just subjects to photograph and frame. While I enjoy racking up a big checklist, and I've [mostly unsuccessfully] tried my hand at photography, I think that we do new birders a disservice by making these the focus of our birding efforts when there are so many interesting things to learn from birds when we take the time to study their habits and behaviors. Birds can be very entertaining, and slowing down to really observe them can get a person hooked.

One day after work last spring, I drove to an area where I had seen some shorebirds a few days before in a flooded field along the Mississippi River, and I was surprised to find a carload of birders/photographers already there. They were struggling to identify some of the species, and were flipping through field guides and zooming in on the digital displays of their high-dollar cameras to compare colors and field marks of the birds they had just photographed. Meanwhile, they were missing all kinds of great action! I pointed out to them the "butt-bob" of a Spotted Sandpiper and the probing feeding style of the many Wilson's Snipe working the mudflat, and they were fascinated. I feel confident that these folks will take the time to appreciate the quirky behaviors of various bird species in the future.

Some birds are impossible to ignore because of their behaviors, and often people will make a special effort to identify a bird when they see it doing something odd. I was so proud of my youngest sister when she told me on the phone that she identified a Killdeer after seeing it do a broken-wing display to divert attention from its chicks. I can think of at least two different occasions where a fisherman has told me a story about watching an Osprey crash into the water to catch a fish and struggle to get itself back to a perch tree to eat.

One of the most rewarding experiences that I've had in teaching people about birds was related to the topic of bird behavior. Unfortunately, I wasn't actually out birding at the time, but I was giving a presentation about grassland birds of South Dakota to an audience composed mostly of non-birders. While speaking about South Dakota's prairie grouse, I showed videos of Sharp-tailed Grouse and Greater Prairie-Chickens displaying on leks. I didn't know what kind of reaction the videos might generate–frankly, I was pretty worried that I might have put the crowd to sleep by that point–but I wasn't prepared for the many smiles and laughs that those birds generated with their zany breeding antics. I only hope that some of the people at that presentation will someday seek out this amusing show in the wild, and that others will be able to do so for many, many years to come.

HISTORIC AND RECENT NESTING RECORDS OF TURKEY VULTURES IN SOUTH DAKOTA

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Present-day vultures are generally classified into two distinct groups: Old World vultures and New World vultures. The two groups share morphological and behavioral characters (e.g., scavenger diet, energy-efficient soaring, mostly featherless head), but historically the two groups were considered phylogenetically distant with long and independent histories (Rich 1983, Wink 1995, Zhang et al. 2012). Old World vultures occur in the family Accipitridae and are closely related to hawks and eagles. New World Vultures occur in the family Cathartidae but their taxonomic placement has been controversial. New World vultures were previously allied with storks (Ciconiidae) but were usually placed within the order Falconiformes. Recent phylogenomic analyses using DNA sequencing suggest that New World vultures show no affinity with storks and support placement of New World vultures with other landbirds (in the order Accipitriformes, near Accipitridae) rather than with waterbirds (Hackett et al. 2008). Old World vultures presently are confined to Europe, Asia, and Africa, and New World vultures presently occur in North and South America.

The terminology "Old World" and "New World" is somewhat misleading, because fossil records for both vulture groups occur in both regions (Rich 1983). South Dakota has a rich and diverse fossil record of extinct Old World vultures that dates back to at least the Late Oligocene-Lower Miocene transition (28-16 million radiocarbon years before present [BP]) (Miller and Compton 1939, Compton 1935, Howard 1966, Brodkorb 1967, Benson 1987, Ducey 1992). Many large, carrion-eating birds, including Old World vultures, became extinct in North America near the end of the Pleistocene (11,500-10,000 BP), apparently as an aftereffect of the extinctions of many large, land-dwelling mammals that these birds likely depended upon for food (Steadman and Martin 1984, Wilkinson 2011). Some smaller vulturine species, including the Turkey Vulture (*Cathartes aura*), survived the Pleistocene extinctions, ostensibly because they specialized on smaller carrion.

The Turkey Vulture is the only extant species of New World vulture that nests in South Dakota. Herein, we summarize the current state of our knowledge on the breeding status and distribution of this relatively conspicuous species in South Dakota. The presence of Turkey Vultures has been noted by field naturalists in South Dakota for well over a century. Hoffman (1875), for example, reported that Turkey Vultures occurred frequently at the Grand River Agency and Military Post in Corson County of the western Dakota Territory between October 1872 and June 1873. During the Custer Expedition in 1874, Grinnell (1875) reported that Turkey Vultures were "very abundant on the plains" of the southwestern portion of the Dakota Territory. What was reported in western South Dakota was broadly reported elsewhere in the state. For example, Knickerbocker (1869 in Chilson 1968) indicated that the Turkey Vulture was common in and surrounding Fort Wadsworth (later called

Fort Sisseton). McChesney (1879) also reported that Turkey Vultures occurred in "considerable numbers" in the Fort Sisseton area of the Dakota Territory between May and October 1878. Agersborg (1885) indicated that the Turkey Vulture was common in summer in southeastern South Dakota, including Clay County and parts of Union, Yankton, Lincoln, and Minnehaha counties.

Turkey Vulture populations in South Dakota (Whitney et al. 1978, Kiff 2000, Tallman et al. 2002) and elsewhere in the northern Great Plains (Roe 1951) began to decline considerably in the late 1800s and early 1900s, presumably due to the loss of free-ranging American bison (*Bison bison*) and expansion of agriculture. Six decades after Knickerbocker's and McChesney's observations, Youngworth (1935) reported that the Turkey Vulture was "not common any more" in the Fort Sisseton area from June 1929 to 1935, and Chilson (1968) indicated that the species was rare in that region in the late 1960s. Three decades after Agersborg published his observations, Visher (1913, 1915) indicated that the Turkey Vulture was only "occasionally" seen during the summer in Sanborn County and "seldom seen" in Clay County. Similarly, Larson (1925) noted that the species was "not a very common summer visitant" in Sioux Falls and vicinity (ca. 1906-1916).

Vulture populations in the Black Hills and elsewhere in western South Dakota seemed more resilient to the loss of carrion and environmental degradation. Visher (1909) injected that the Turkey Vulture was still "tolerably common" in the Black Hills and abundant in the badlands of western South Dakota in the early 1900s. Visher (1912) considered the species as "an abundant summer resident" in Fall River County in southwestern South Dakota between 22 July and 8 August 1911. Visher (1914) regarded the Turkey Vulture as a "tolerably abundant summer resident" in Harding County during the summers of 1910-1912. Vultures remain "common" in the Bad River Watershed of western South Dakota, including parts of Pennington, Haakon, Jackson, Stanley, Jones, and Lyman counties (USDA 1998).

Although the state's breeding population has rebounded in recent years, increasing by nearly 6% per year between 1967 and 2011 (Sauer et al. 2012), the species' breeding distribution in South Dakota is now largely restricted to counties west of the Missouri River (Whitney et al. 1978, SDOU 1991, Tallman et al. 2002). Summer observations east of the Missouri River are considered casual but often are deemed noteworthy (e.g., Tallman 1983, Tallman et al. 2002). During the first South Dakota Breeding Bird Atlas from 1988 to 1993, the species' statewide relative abundance during the breeding season was categorized as uncommon (occurring in only twenty of 124 random Atlas blocks), and its distribution was considered scattered (occurring in ten of seventeen Atlas regions) (Peterson 1995).

Little is known about the species' nesting biology in the state. Historic and present-day accounts consistently have indicated that the Turkey Vulture nests in South Dakota, but the publications rarely provided details of individual nests. For example, Knickerbocker (1869 in Chilson 1968) and McChesney (1879) indicated that the Turkey Vulture was a breeder in the Fort Sisseton area in Marshall County. Agersborg (1885) and Visher (1915) stated that the Turkey Vulture bred in Clay County in southeastern South Dakota. Over and Thoms (1921) asserted that the species has been "known to nest" in Harding County in northwestern South Dakota, presumably on shelves under overhanging cliffs. Some observers surmised that nesting occurred in an area based on the presence of Turkey Vultures during the

breeding season (e.g., Backlund [1973] in Lyman and Brule counties, Skadsen [1988] in Charles Mix County).

The Turkey Vulture has a rather prolonged nesting cycle that covers nearly four months (Mossman 1991, Kirk and Mossman 1998). In general, the species lays one to three eggs (typically two) over several days; the incubation period is thirty-eight to forty days, and nestlings usually remain in the nest for sixty to eighty days after hatch. Several publications have suggested that the nesting period for this species in South Dakota includes only May through July. Whitney et al. (1978) were perhaps the first authors to do so. They surmised that the normal nesting period of the Turkey Vulture in South Dakota was "probably May through July", but their estimate was based on only one known nest record with two nestlings from Gregory County in late June 1969. The checklist committee of the South Dakota Ornithologists' Union similarly concluded that the nesting period of the Turkey Vulture in South Dakota was "probably May through July", based on two known nest records (SDOU 1991). Tallman et al. (2002) likewise listed the nesting period as including only May through July, although the authors included records of nests with nestlings on 7 and 9 August and a nest with recently fledged young on 28 August. This three-month period also was reflected in the guidelines for the second Breeding Bird Atlas in South Dakota (2008-2012), which recommended that breeding Turkey Vultures should only be recorded if an observation falls between the safe dates of 1 May to 31 July or if nesting was confirmed (RMBO 2009).

There have been no focal studies of nesting Turkey Vultures in South Dakota, and in general, there are very few observers actively searching for nests in the state. Moreover, the Turkey Vulture establishes nests at notoriously isolated and inaccessible sites, often far away from human activity (Kirk and Mossman 1998). Thus, information on nesting in South Dakota is based largely on chance encounters with vulture nests or dependent young. Table 1 [*Please see Page 16*] summarizes information from the twenty-five reported Turkey Vulture nests or dependent young in South Dakota. The first published Turkey Vulture nest in South Dakota was reported by F. A. Patton, who found at least one Turkey Vulture nest in the Slim Buttes of Harding County on 9 May 1925 (Patton 1926). To our knowledge, there were no published records of vulture nests in South Dakota before this date. Nests or dependent young were reported from eleven of the sixty-six counties in South Dakota (Table 1, Fig. 1). [*For Figure 1, please see Page 15*.] All twenty-five records were from counties west of, or adjacent to, the Missouri River or counties adjacent to the Big Sioux River in the southeastern corner of the state (Fig. 1). Four of the twenty-five records involved eggs (see below), and twelve records involved nestlings (1 June-9 August) (Table 1). Three records involved recently fledged or dependent young (9 July-28 August). Six records of vulture nests or dependent young (15 June-25 August) were located during the years of the first Breeding Bird Atlas in South Dakota (Peterson 1995; R. Peterson, pers. comm.).

At least thirteen of the twenty-five records from South Dakota describe nests in natural sites (i.e., caves, holes, or ledges on cliffs, bluffs, or banks) rather than in human-made structures. For example, Ricky Olson found a vulture nest in a hole in the bank of Lake Oahe in Hughes County on 3 August 2008 (Olson 2008, R. Olson, pers. comm.). The six nests found during the first Breeding Bird Atlas in South Dakota were located on cliffs (N. Drilling and R. A. Peterson, pers. comm.). Nests found in Wind Cave National Park in Custer County in 1991 and 2004 were

in small caves in cliffs (B. Mueschau, pers. comm.).

At least ten nests in South Dakota occurred in human-made structures, including four nests in abandoned buildings. The North American Nest-Record Card Program (Cornell Lab of Ornithology) included one South Dakota record of a vulture nest discovered by S. H. Sutley in the attic of an abandoned house in Pennington County in 1974 (Mossman 1991; J. Lowe pers. comm.). On 9 August 1996, Gil Blankespoor (pers. comm.) found two adult vultures and a nestling in the upper level of an abandoned farm building in Minnehaha County. On 27 July 1997, Ricky Olson (pers. comm.) reported two downy white nestlings on the second floor of an abandoned house in Tripp County. In the early 2000s, Ricky Olson (pers. comm.) observed two vulture nestlings in a barn loft in Tripp County. A nest site that was active between 2007 and 2012 in Butte County involved an abandoned vehicle (Fig. 2; Igl and Peterson 2010). [*Please see Page 31 for color photos of Figure 2*.] Houston et al. (2007, 2011) reported a recent increase in the use of abandoned buildings by nesting Turkey Vultures in northern breeding populations in Canada, but there is no evidence to support that the number of vulture nests in abandoned buildings is increasing in South Dakota.

Vulture nests in South Dakota were not monitored throughout the breeding season, with two exceptions (Table 1). In Pennington County in 1974, S. H. Sutley reported adult vultures near a nest site on 17 May, adults entering the nest site on 5 June, and white downy nestlings with pin feathers at the nest site on 14 July (Mossman 1991; J. Lowe pers. comm.). Steve Baldwin discovered a vulture nest on a limestone bluff in Custer County in mid-May 1990; this nest was periodically visited by several observers throughout that summer (Hachmeister and Hachmeister 1991). The nest contained two small nestlings and an adult on 22 June, two chicken-sized downy nestlings on 25 July, and two young with well-developed primaries on 7 August. The young were not present on 3 September.

Turkey Vultures often show strong attachment to the same nest site for multiple years, especially if the pair was successful in raising young at that particular site (Kirk and Mossman 1998, Peck 2003). Nest sites in South Dakota were not revisited in subsequent years, with two exceptions (Table 1). Stan Allison discovered a nest with one downy vulture chick in Wind Cave National Park in Custer County in 1991 (B. Muenchau, pers. comm.). On 1 May 1997, Dan Roddy revisited that nest site and found fresh whitewash, part of a vulture eggshell, and a wing feather, indicating that the nest site was still active. On 19 June 2012, Dan Roddy returned to the site and noted that two adult vultures were flying low over the nest site.

The second exception is a nest site first discovered by Igl and Peterson (2010) in 2007 in the rear luggage compartment of an abandoned vehicle in Butte County and checked in subsequent years (Table 1, Fig. 2). Here we provide additional details from that nest site, which was likely active beginning in 2005 and 2006, but attempts to locate the nest in those two years were unsuccessful. Between 2007 and 2012, we visited this nest site for one to four days in late May or early June. We do not know if the same breeding pair nested at this site in each of those six years, but photographs of diagnostic facial warts (papillae) in front of the right eye of an adult on the nest in 2009 and 2011 indicated that this was the same individual in both years. In four of the six years (2007-2012), this nest site contained eggs (29 May-4 June). These are the only nest records with eggs in South Dakota. We did not

monitor the nests throughout the breeding season in any of the six years. However, in late May 2009, we were present when egg-laying began. If the 2009 nest was successful, the lone egg would have hatched during the first week of July and the young would have fledged between the first and last week of September, assuming a thirty-eight to forty day incubation period and a sixty- to eighty-day nestling period. In 2010, we were present in early June when the second egg had hatched. We estimate that the 2010 nest was initiated about 20 April by using thirty-eight to forty incubation days and backdating from the date (~1 June) that the second egg had hatched. If the 2010 nest was successful, chicks from the 2010 nest would have fledged between the last week in July and the third week in August. This nest site in Butte County was destroyed in the spring of 2013, when the abandoned vehicle was removed from the area, presumably by the landowner. A vulture pair was present on 28 May 2013, but we were unable to locate a nest in that year.

The estimated initiation date for the 2010 nest in Butte County (described above) was likely not the earliest nest initiation in South Dakota. Draeger and Johnson (2008, pers. comm.) observed a recently fledged vulture young with down on its head on 9 July 2008 in Union County. The fledgling was observed near a dead tree that adult vultures frequented throughout the breeding season from 29 March to 13 September. By backdating from the date that this fledgling was first observed (9 July), we estimate that this fledgling was from a nest that was initiated sometime between mid-March and early April. In spring 2008, this species was first reported arriving in South Dakota between 24 and 29 March (Palmer 2008).

Information on the nesting biology of Turkey Vultures in surrounding states is equally sparse. In North Dakota, the species breeds primarily in the badlands and along the Missouri River, but only five nest records have been documented for that state (Stewart 1975). The Montana Bird Distribution Database contains eighty-four breeding records for Turkey Vultures from 1990-2012, including ten records (May-August) with direct evidence of nesting and seventy-four records (April-September) with indirect evidence of nesting (MNHP 2013). In Wyoming, the species is classified as a summer resident; nests or dependent young have been reported in nine of twenty-eight degree blocks (a rectangle covering one degree of latitude by one degree of longitude), and circumstantial evidence of nesting has been reported in fourteen other blocks (Faulkner 2010, Orabona et al. 2012). In Nebraska, the species is considered a locally uncommon regular breeder with known nest sites concentrated in the west, north, and southeast (Sharpe et al. 2001). Most nest records for Turkey Vultures in Iowa occur in the south-central portion of the state (Kent and Dinsmore 1996). Dinsmore et al. (1984) noted that egg-laying in Iowa occurs in late April or May, eggs hatch in June, and the nestling period is 8-10 weeks long. The summer distribution of the Turkey Vulture is widespread in Minnesota, but Johnson (1982) and Tenney (1986) indicated that little is known about the nesting biology of the species in Minnesota.

Conclusion.—There are only twenty-five records of Turkey Vulture nests or dependent young from South Dakota. Although much of our knowledge concerning the nesting biology of the Turkey Vulture in South Dakota comes from chance encounters with nests or dependent young, these records provide unambiguous evidence that the Turkey Vulture nests in the state. Recent nesting records expand the known nesting season for Turkey Vultures in South Dakota to include at least April to September (and perhaps as early as late March). Ongoing studies of

vultures nesting in abandoned farm buildings have provided significant gains in our knowledge of the breeding biology of Turkey Vultures in the northern portion of the species' breeding range (Houston et al. 2007, 2011), but detailed studies on the natural history and breeding ecology of Turkey Vultures are sorely needed in South Dakota and elsewhere in the northern Great Plains.

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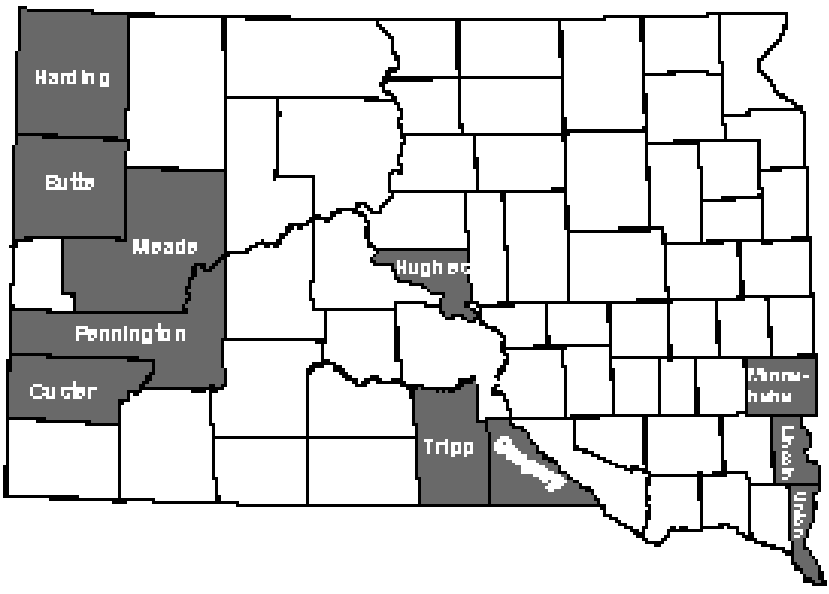

Table 1. Summary of Turkey Vulture nests and dependent young in South Dakota

County	Year	Eggs (no.)	Nestlings (no.)	Fledglings (no.)	Nest contents unknown
Harding	1925				Nest discovered on 9 May
Gregory	1969		Late June (2)		
Pennington	1974		14 July (2)		Adults entering nest site on 5 June
Lincoln	1985			3 & 25 August (2)	
Tripp	1988				Occupied nest on 15 June
Custer Co.	1988		3 July (1)		
Custer Co.	1988				Adult on nest on 3 July
Custer	1990		22 June–7 August (2)		Adult on nest in mid-May
Meade	1990			28 August (2)	
Pennington	1991				Occupied nest on 23 June
Custer	1991		Unknown date (1)		
Meade	1995		18 July (2)		
Minnehaha	1996		9 August (1)		
Custer	1997				Whitewash and egg shell on 1 June
Tripp [1]	1997		27 July (2)		
Tripp [2]	Early 2000s		Unknown date (2)		
Custer	2004		6 July (1)		
Butte [3]	2007	30 May (2)			
Butte [3]	2008	30 May (2) [4]			
Union	2008			9 July (1)	
Hughes	2008		3 August (1)		
Butte [3]	2009				Adult on nest on 30 May
Butte [3]	2010	1–4 June (1-2) [3]	1–4 June (1-2) [3]		
Butte [3]	2011				Adult on nest on 1 June
Butte [3]	2012	31 May (2)			

[1] Ricky Olson (pers.comm.) reported a possible second vulture nest in Hughes County in 2008, 1 mile south of the powerhouse on Lake Oahe in a cliff bank; Kenny Miller observed an adult Turkey Vulture enter a cliff hole.
[2] Ricky Olson (pers. comm.) observed two vulture nestlings in a barn loft in Tripp County in the early 2000s.
[3] Nest site was described in Igl and Peterson (2010). See Figure 2.

	Source
	Patton (1926)
	Lee Eberly (Whitney et al. 1978)
	S. H. Sutley (Cornell Nest Record Program, Mossman 1991)
	Springer and Skadsen (1986); Harris (1986)
	Richard A. and Juanita L. Peterson in Breeding Bird Atlas data (Tallman et al. 2002; R. A. Peterson, pers. comm. N. Drilling, pers. comm.)
	Richard A. and Juanita L. Peterson in Breeding Bird Atlas data (SDOU 1991; R. A. Peterson, pers. comm.; N. Drilling, pers. comm.)
	Richard A. and Juanita L. Peterson in Breeding Bird Atlas data (R. A. Peterson, pers. comm.; N. Drilling, pers. comm.)
	Steve Baldwin (Hachmeister and Hachmeister 1991)
	Michael M. Melius in Breeding Bird Atlas data (Tallman et al. 2002; N. Drilling, pers. comm.)
	Joe Zarki in Breeding Bird Atlas data (Tallman et al. 2002; N. Drilling, pers. comm.)
	Stan Allison (B. Muenchau, pers. comm.)
	Earnest E. Miller in Palmer 1995
	Gilbert W. Blankespoor in Palmer (1997a)
	Dan Roddy (B. Muenchau, pers. comm.)
	Ricky Olson (pers. comm.), Rare Bird Alert in Palmer (1997b)
	Ricky Olson (pers. comm.)
	Jason Walz and Seth Spoelman (B. Muenchau, pers. comm.)
	Lawrence D. Igl and Stephen L. Peterson (2010)
	Lawrence D. Igl and Stephen L. Peterson (2010)
	Draeger and Johnson (2008), Rosemary Draeger and Linda Johnson (pers. comm.)
	Olson (2008); Ricky Olson (pers. comm.)
	Lawrence D. Igl and Stephen L. Peterson (2010)
	Igl et al. (this paper)
	Igl et al. (this paper)
	Igl et al. (this paper)

[4] No eggs were present on 28 May 2008, and two eggs (one intact and one broken) were found on 30 May 2008

[5] Two eggs and one nestling (~3 days old) were noted on 1 June 2010, and one egg and two nestlings (~3 and 6 days old) were noted on 4 June 2010.

Seasonal Reports

The 2013 Fall Season

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01 August 2013 to 30 November 2013

There were 311 species, including 9 rarities, reported during the 2013 Fall Season. The 10-year average (2003-2012) is 309. Below, I have tried to highlight the more significant sightings (early/late dates as given in the online database and species that are significantly out of range). For early/late migration dates, I have listed the three earliest/latest dates (by county). However, if these did not include a sighting East River, West River, and along the Missouri River, I have included the earliest/latest reported date from the missing region also. Included at the end of this report is a list of species that were not reported this year but might be expected during the Fall Season. A species is placed on the list if it was not reported this year but had been reported during fall in at least 2 of the previous 5 years. Numbers in parentheses indicate the number of consecutive years (up to 4) that the species has appeared on the list during the season.

Greater White-fronted Goose Early: 24 Aug Charles Mix DS; 13 Oct Aurora CA, KP; 17 Oct Codington BJU; 14 Nov Perkins ND … Late: 30 Nov Lake JSP; 30 Nov Charles Mix SS, KP; 27 Nov Lyman ND; 27 Nov Hamlin BJU

Snow Goose Early: 19 Aug Brown GO; 24 Aug Charles Mix DS; 09 Sep Day BP; 28 Sep Bennett RSL

Ross's Goose Early: 17 Oct Codington BJU; 01 Nov Grant BJU; 11 Nov Campbell ND; 28 Nov Pennington JLB … Late: 30 Nov Hughes RDO; 29 Nov Pennington JLB; 28 Nov Bon Homme ND; 27 Nov Roberts BJU

Cackling Goose Early: 17 Oct Codington and Deuel BJU; 28 Oct Grant and Roberts BJU; 03 Nov Yankton RND; 14 Nov Perkins ND

Trumpeter Swan All Reports: 25 Oct Jones SS; 02 Nov Butte JLB; 14 Nov Roberts BJU

Tundra Swan Early: 17 Oct Codington BJU; 19 Oct Deuel RND; 24 Oct Brown GO … Late: 27 Nov Hamlin BJU; 17 Nov Hand SS; 11 Nov McPherson ND

Wood Duck Late: 28 Nov Hughes DB; 24 Nov Yankton RND; 24 Nov Charles Mix KP, CA; 06 Nov Roberts BJU; 31 Oct Pennington CLG

Gadwall Late: 29 Nov Yankton RND; 29 Nov Pennington JLB; 28 Nov Bon Homme ND; 27 Nov Grant BJU

American Wigeon Late: 29 Nov Yankton RND, BFH; 29 Nov Pennington JLB; 23 Nov Buffalo JSP; 19 Nov Spink and Edmunds GO

American Black Duck Only Report: 27 Nov Grant BJU

Blue-winged Teal Late: 11 Nov Edmunds ND; 02 Nov Hutchinson KP; 25 Oct Yankton RND; 25 Oct Jones SS

Cinnamon Teal Only Report: **23 Aug Pennington ND**

Northern Shoveler Late: 30 Nov Lake JSP; 30 Nov Charles Mix SS, KP; 29 Nov Yankton DS; 10 Nov Pennington JLB

Northern Pintail Late: 30 Nov Lake JSP; 29 Nov Yankton RND, BFH; 27 Nov Brule ND; 14 Nov Perkins ND

Green-winged Teal Late: 24 Nov Yankton RND; 24 Nov Hughes KM; 17 Nov Stanley RDO; 17 Nov Hand SS; 16 Nov Butte JLB

Canvasback Late: 29 Nov Yankton RND, BFH; 27 Nov Jones ND; 17 Nov Stanley RDO; 14 Nov Roberts and Grant BJU

Redhead Late: 30 Nov Hughes RDO; 29 Nov Yankton RND; 29 Nov Pennington JLB; 14 Nov Roberts and Grant BJU

Ring-necked Duck Late: 30 Nov Pennington JLB; 30 Nov Hughes RDO; 29 Nov Yankton BFH; 14 Nov Roberts and Grant BJU

Greater Scaup Early: 28 Oct Grant BJU; 06 Nov Stanley RDO; 14 Nov Roberts BJU … Late: 30 Nov Hughes RDO; 27 Nov Roberts and Grant BJU

Lesser Scaup Late: 29 Nov Pennington JLB; 28 Nov Hughes DB; 27 Nov Grant BJU

Surf Scoter All Reports: 13 Oct Stanley (10) DB, RDO; 17 Oct Codington BJU; 28 Oct Grant BJU; 11 Nov Yankton DS; 12 Nov Yankton RND

White-winged Scoter Early: 20 Oct Sully RDO; 01 Nov Grant BJU; 11 Nov Yankton DS; 18 Nov Butte ND … Late: 29 Nov Yankton BFH; 29 Nov Gregory and Charles Mix ND

Black Scoter Early: 01 Nov Grant BJU; 02 Nov Hutchinson KP; 02 Nov Yankton DS … Late: 29 Nov Yankton BFH; 16 Nov Sully DB; 06 Nov Stanley DB

Long-tailed Duck Early: 16 Nov Butte JLB; 19 Nov Pennington JLB, RSL; 24 Nov Yankton RND; 27 Nov Grant BJU … Late: 29 Nov Yankton DS, BFH; 29 Nov Pennington JLB; 29 Nov Gregory and Charles Mix ND

Bufflehead Early: 07 Oct Grant BJU; 13 Oct Stanley DB; 16 Oct Pennington OCW

Common Goldeneye Early: 28 Oct Grant BJU; 01 Nov Roberts BJU; 06 Nov Stanley DB, RDO; 12 Nov Pennington JLB

Hooded Merganser Early: 09 Aug Lake JSP; 15 Aug Mellette SS; 26 Aug Grant BJU; 25 Oct Yankton RND … Late: 30 Nov Sully DB; 30 Nov Hughes RDO; 30 Nov Charles Mix SS, KP; 29 Nov Pennington JLB; 27 Nov Grant BJU

Common Merganser Early: 05 Aug Pennington CLG; 16 Sep Hughes DB; 25 Oct Perkins ND; 01 Nov Grant BJU

Red-breasted Merganser Early: 28 Oct Grant BJU; 12 Nov Hughes DB; 14 Nov Roberts BJU … Late: 30 Nov Sully DB; 30 Nov Hughes RDO; 30 Nov Charles Mix SS, KP

Ruddy Duck Late: 27 Nov Grant BJU; 17 Nov Hand SS; 16 Nov Kingsbury JSP; 11 Nov Potter ND; 11 Nov Pennington CLG

Greater Prairie-Chicken All Reports: 24 Aug Buffalo ND; 14 Sep Haakon ND; 17 Oct Deuel BJU

Pacific Loon All Reports: 17 Oct Deuel BJU; 02 Nov Sully DB, SS; 10 Nov Sully CA, RSL, SS

Common Loon Early: 10 Aug Lake JSP; 17 Aug Fall River ND; 18 Aug Charles Mix KP … Late: 30 Nov Sully DB; 12 Nov Gregory RM; 11 Nov Hughes DB; 02 Nov Butte JLB; 19 Oct Day RND

Pied-billed Grebe Late: 29 Nov Yankton DS, BFH; 29 Nov Pennington JLB; 18 Nov Meade ND; 16 Nov Brookings JSP

Horned Grebe Early: 20 Sep Yankton RND; 28 Sep Hughes DB; 06 Oct Brule KP; 13 Oct Aurora CA, KP; 25 Oct Perkins ND … Late: 19 Nov Pennington ND; 16 Nov Sully DB; 11 Nov Potter ND; 02 Nov Hutchinson and Douglas KP

Red-necked Grebe All Reports: 17 Oct Codington BJU; 19 Oct Pennington ND; 26 Nov Hughes DB; 28 Nov Hughes DB; 30 Nov Hughes DB, RDO

Eared Grebe Late: 08 Nov Butte EK; 03 Nov Pennington JLB; 26 Oct Gregory RM; 13 Oct Aurora KP, CA

Western Grebe Late: 30 Nov Sully DB; 30 Nov Hughes RDO, DB; 20 Nov Butte ND; 06 Nov Marshall GO

Clark's Grebe All Reports: 15 Sep Charles Mix RM; 15 Sep Stanley RDO; 21 Sep Pennington JLB; 03 Nov Sully RDO

American White Pelican Late: 27 Nov Hamlin BJU; 27 Nov Buffalo ND; 23 Nov Minnehaha CA; 02 Nov Butte JLB

Double-crested Cormorant Late: 30 Nov Charles Mix SS, KP; 29 Nov Yankton RND; 27 Nov Brule ND; 20 Nov Butte ND; 14 Nov Roberts and Grant BJU

American Bittern All Reports: 17 Aug Sanborn CA; 18 Aug Brown CA

Least Bittern Only Report: 10 Aug Roberts MO

Great Blue Heron Late: 30 Nov Pennington JLB; 24 Nov Yankton RND; 16 Nov Brookings JSP

Great Egret Late: 28 Oct Grant BJU; 26 Oct Kingsbury JSP; 19 Oct Brookings JSP; 09 Oct Brule RM; 07 Aug Tripp KP

Snowy Egret Late: 19 Oct Day RND; 29 Sep Codington JSP; 27 Sep Charles Mix RM

Cattle Egret Late: 26 Oct Kingsbury JSP; 15 Oct Hughes KM; 09 Oct Brule RM; 28 Sep Bennett RSL

Green Heron Late: 12 Oct Minnehaha MRZ; 28 Sep Roberts JSP; 07 Sep Lake JSP; 04 Sep Charles Mix RM

Black-crowned Night-Heron Late: 27 Sep Charles Mix RM; 11 Sep Douglas KP; 02 Sep Brown GO

Yellow-crowned Night-Heron All Reports: **04 Aug Lincoln CA; 02 Oct Brown JK**

White-faced Ibis Late: 26 Oct Kingsbury JSP; 19 Oct Lake JSP; 11 Oct Day BP; 02 Oct Charles Mix RM

Turkey Vulture Late: **23 Oct Harding ND;** 15 Oct Hughes KM; 13 Oct Lincoln MRZ

Osprey Early: 01 Aug Lawrence and Pennington JLB; 03 Aug Charles Mix KP; 04 Aug Minnehaha MRZ … Late: **23 Nov Yankton DS;** 22 Oct Hughes DB; 20 Oct Edmunds GO; 16 Oct Pennington OCW

Northern Harrier Late: 30 Nov Day GO; 28 Nov Bon Homme ND; 27 Nov Sully DB; 27 Nov Hamlin, Grant, Deuel, and Codington BJU; 18 Nov Butte ND

Sharp-shinned Hawk Early: 04 Sep Deuel BJU; 14 Sep Hughes RSL; 23 Sep Harding DB

Northern Goshawk All Reports: 02 Sep Pennington ND; 15 Nov Pennington ND; 26 Nov Brown GO

Broad-winged Hawk Early: 04 Sep Grant and Roberts BJU; 18 Sep Brown GO; 21 Sep Charles Mix RM; 25 Sep Perkins DB … Late: **16 Oct Hughes DB;** 13 Oct Aurora KP, CA; 11 Oct Charles Mix RM

Swainson's Hawk Late: **10 Nov Brule RND;** 18 Oct Charles Mix RM; 09 Oct Hughes DB; 08 Oct Jones DB; 07 Oct Deuel BJU

Ferruginous Hawk Late: 30 Nov Pennington ND; 10 Nov Sully RND, RSL, CA; 03 Nov Harding ND

Rough-legged Hawk Early: 23 Oct Harding and Perkins ND; 25 Oct Campbell RDO; 25 Oct Meade EEM; 26 Oct Kingsbury JSP

Golden Eagle Early: 26 Oct Corson ND; 01 Nov Grant BJU; 09 Nov Sully KP, SS

Virginia Rail All Reports: 18 Aug Beadle SS; 23 Aug Sully KM; 21 Sep Brookings JSP

Sora Late: 19 Oct Hughes KM; 27 Sep Charles Mix RM; 21 Sep Brookings JSP

Common Gallinule All Reports: 19 Aug Brown and Marshall GO

American Coot Late: 29 Nov Yankton RND; 27 Nov Jones ND; 27 Nov Grant BJU

Sandhill Crane Early: 27 Sep Roberts MO; 09 Oct Charles Mix RM; 10 Oct Meade EEM … Late: 14 Nov Charles Mix RM; 10 Nov Lake JSP; 07 Nov Edmunds GO; 07 Nov Douglas KP; 02 Nov Butte JLB

Whooping Crane Only Report: **20 Nov Charles Mix (7) RM**

Black-bellied Plover Early: 03 Aug Pennington JLB; 08 Aug Hughes DB, RDO; 09 Aug Yankton RND; 24 Aug Douglas ND … Late: 02 Nov Minnehaha JSP; 17 Oct Codington BJU; 07 Oct Grant and Deuel BJU; 23 Sep Hughes SS

American Golden-Plover Early: 28 Aug Yankton RND; 31 Aug Hughes JLB, RSL; 07 Sep Miner JSP … Late: 22 Sep Minnehaha KP; 22 Sep Hughes RDO; 21 Sep Brookings JSP
Semipalmated Plover Late: 22 Sep Hughes RDO; 15 Sep Minnehaha MRZ, CA; 04 Sep Deuel BJU; 31 Aug Fall River DS, JSP
Piping Plover All Reports: 04 Aug Clay CA, DS; **14 Sep Clay GJS**
Killdeer Late: 26 Nov Pennington JLB; 10 Nov Brule RND; 09 Nov Lake JSP
American Avocet Late: **08 Nov Stanley JLB; 08 Nov Brule RM, RND; 05 Nov Hughes RDO;** 28 Oct Grant BJU; 26 Oct Harding KM … also reported **21 Sep Kingsbury (480) JSP**
Spotted Sandpiper Late: 30 Sep Meade SS; 16 Sep Pennington CLG; 15 Sep Minnehaha MRZ, CA; 15 Sep Charles Mix KP
Solitary Sandpiper Late: **28 Sep Hughes DB;** 04 Sep Roberts and Grant BJU; 12 Aug Lawrence SS
Greater Yellowlegs Late: 06 Nov Marshall GO; 02 Nov Minnehaha JSP; 02 Nov Clay DS; 16 Oct Custer MMM
Willet Late: **29 Sep Douglas KP;** 01 Sep Brown GO; 17 Aug Sanborn CA; 11 Aug Hyde RDO
Lesser Yellowlegs Late: 01 Nov Grant BJU; 28 Oct Charles Mix RM; 24 Oct Brown GO; 23 Aug Haakon SS
Upland Sandpiper Late: 06 Sep Custer MMM; 27 Aug Douglas KP; 21 Aug Yankton RND
Long-billed Curlew Only Report: 17 Aug Fall River ND
Hudsonian Godwit Only Report: **14 Sep Kingsbury JSP**
Marbled Godwit Late: **09 Oct Charles Mix and Brule RM;** 14 Sep Kingsbury JSP; 29 Aug Pennington JLB
Sanderling Late: 23 Sep Hughes SS; 08 Sep Butte SS; 04 Sep Grant BJU
Semipalmated Sandpiper Late: **09 Oct Brule RM;** 29 Sep Yankton RND; 28 Sep Bennett RSL; 21 Sep Kingsbury JSP
Least Sandpiper Late: 27 Oct Charles Mix KP; 26 Oct Kingsbury JSP; 25 Oct Perkins ND
White-rumped Sandpiper Early: 08 Aug Faulk MMM; 09 Aug Yankton RND; 17 Aug Charles Mix RM … Late: 27 Sep Charles Mix RM; 07 Sep Brown BP; 31 Aug Sully RSL
Baird's Sandpiper Late: 09 Oct Charles Mix and Brule RM; 07 Oct Lincoln CA; 07 Oct Grant and Deuel BJU; 23 Aug Haakon SS
Pectoral Sandpiper Late: 09 Nov Lake JSP; 08 Nov Brule RM, RND; 16 Oct Douglas KP; 28 Sep Bennett RSL
Dunlin Only Report: 01 Sep Brown GO
Stilt Sandpiper Late: **02 Nov Hutchinson KP;** 29 Sep Douglas KP; 22 Sep Hughes RDO; 09 Aug Mellette SS
Buff-breasted Sandpiper Early: 08 Aug Hughes DB; 09 Aug Lake JSP; 13 Aug Yankton RND … Late: 08 Sep Clay DS; 07 Sep Miner JSP; 04 Sep Grant and Deuel BJU
Short-billed Dowitcher Late: 07 Sep Brown BP; 04 Sep Grant and Deuel BJU; 28 Aug Yankton RND
Long-billed Dowitcher Late: 02 Nov Minnehaha JSP; 27 Oct Charles Mix KP; 26 Oct Kingsbury JSP; 28 Sep Bennett RSL
Wilson's Snipe Late: 11 Nov Kingsbury JSP; 09 Nov Lake JSP; 08 Nov Pennington MMM; 09 Oct Hughes DB; 09 Oct Brule RM
American Woodcock Only Report: 09 Oct Minnehaha CA
Wilson's Phalarope Late: 21 Sep Kingsbury JSP; 20 Sep Yankton RND; 03 Sep Hughes RDO; 29 Aug Pennington JLB
Red-necked Phalarope Late: 07 Oct Grant BJU; 21 Sep Kingsbury JSP; 24 Aug Yankton ND; 24 Aug Brule RND, JSP
Sabine's Gull All Reports: **04 Sep Grant BJU;** 15 Sep Hughes RDO; 26 Sep Stanley RDO; 04 Oct Hughes DB; 23 Oct Minnehaha DC, MRZ
Bonaparte's Gull Early: 23 Aug Brule DC; 25 Aug Yankton ND; 26 Sep Stanley RDO; 07 Oct Grant BJU; 17 Oct Meade ND … Late: 30 Nov Hughes RDO; 30 Nov Charles Mix SS, KP; 29 Nov Gregory ND; 16 Nov Brookings JSP; 08 Nov Butte EK
Franklin's Gull Late: 11 Nov Kingsbury JSP; 09 Nov Lake JSP; 06 Nov Marshall and Day GO; 30 Oct Hughes DB; 26 Oct Butte JLB
Ring-billed Gull Late: 30 Nov Hughes RDO; 30 Nov Charles Mix SS, KP; 30 Nov Butte ND, JLB; 23 Nov Minnehaha CA
California Gull Late: 22 Nov Hughes RDO; 17 Nov Charles Mix RM; 20 Oct Pennington JLB
Herring Gull Early: 31 Aug Fall River DS, JSP; 14 Sep Hughes RDO; 15 Sep Lyman RDO; 27 Sep Minnehaha MRZ … Late: 14 Nov Roberts and Grant BJU; 11 Nov Kingsbury JSP; 17 Oct Butte ND
Thayer's Gull Early: 10 Nov Brule DS; 16 Nov Yankton DS; 23 Nov Buffalo JSP
Lesser Black-backed Gull reported 29 Aug Stanley RDO; 04 Oct Hughes DB; 05 Oct Sully RDO; 03 Nov Sully RDO; 05 Nov Hughes RDO
Glaucous Gull Only Report: 27 Nov Grant BJU
Least Tern Late: 25 Aug Yankton ND; 18 Aug Sully KM; 04 Aug Clay DS, CA
Caspian Tern All Reports: 21 Aug Yankton RND; 04 Sep Roberts BJU; 08 Sep Lawrence SS; 21 Sep Butte EK
Black Tern Late: 27 Sep Charles Mix RM; 14 Sep Kingsbury JSP; 07 Sep Douglas KP; 07 Sep Brown BP; 07 Aug Tripp KP
Common Tern Late: **15 Oct Hughes KM;** 13 Oct Sully DB; 06 Oct Lyman RDO; 17 Aug Miner CA

Forster's Tern Late: 17 Oct Charles Mix RM; 16 Oct Gregory RM; 15 Oct Hughes KM; 13 Oct Jerauld KP, CA; 15 Sep Jones ND
Mourning Dove Late: 24 Nov Yankton CA; 23 Nov Stanley RDO; 23 Nov Hughes DB; 16 Nov Brookings JSP; 10 Nov Jones ND; 10 Nov Custer MMM
Yellow-billed Cuckoo All Reports: 17 Aug Fall River ND; 31 Aug Union CA, KP
Black-billed Cuckoo Only Report: 03 Sep Marshall GO
Snowy Owl All Reports: 23 Nov Stanley DB; 30 Nov Meade ND
Burrowing Owl Late: **19 Oct Custer MMM;** 25 Sep Perkins DB; 23 Aug Jackson ND; 08 Aug Douglas KP
Long-eared Owl Only Report: 27 Nov Deuel BJU
Short-eared Owl All Reports: 17 Oct Deuel BJU; 27 Nov Codington and Hamlin BJU
Northern Saw-whet Owl reported 22 Oct Harding (7) ND; 27 Nov Deuel BJU
Common Nighthawk Late: 23 Sep Lake JSP; 20 Sep Fall River and Custer MMM; 18 Sep Clay DS
Common Poorwill All Reports: 30 Aug Harding DB; 01 Sep Harding DB
Chuck-will's-widow Only Report: **16 Aug Yankton RSL, RND**
Eastern Whip-poor-will All Reports: 04 Aug Charles Mix RM; 09 Aug Charles Mix RM; 15 Aug Charles Mix RM; 19 Aug Charles Mix RM; 22 Aug Charles Mix RM; 13 Sep Charles Mix RM
Chimney Swift Late: **05 Oct Pennington RSL;** 26 Sep Lake JSP; 18 Sep Douglas KP; 05 Sep Gregory and Charles Mix KP
White-throated Swift All Reports: 02 Aug Custer DB; 10 Aug Custer SS; 11 Aug Meade SS; 31 Aug Custer DS, JSP; 16 Sep Pennington CLG
Ruby-throated Hummingbird Late: **10 Oct Lincoln AH;** 06 Oct Minnehaha MRZ; 02 Oct Clay GJS; 13 Sep Pennington ND, JLB
Broad-tailed Hummingbird All Reports: 02 Aug Custer DB; 05 Aug Pennington ND; 10 Aug Custer SS; 01 Sep Pennington JLB; **02 Sep Pennington JLB**
Rufous Hummingbird Late: 29 Aug Pennington ND; 02 Aug Meade ND; 02 Aug Custer DB
Belted Kingfisher Late: 28 Nov Yankton ND; 26 Nov Pennington JLB; 25 Nov Hughes DB; 25 Nov Charles Mix RM; 14 Nov Roberts BJU
Lewis's Woodpecker All Reports: 02 Aug Custer DB; 31 Aug Custer DS, JSP
Red-headed Woodpecker Late: 12 Oct Lincoln JSP; 28 Sep Hughes KM; 21 Sep Douglas KP; 15 Sep Jones ND
Yellow-bellied Sapsucker Late: 25 Oct Charles Mix RM; 10 Oct Brown GO; 08 Oct Edmunds GO
Red-naped Sapsucker All Reports: 08 Sep Meade RSL; 14 Sep Lawrence EK
Black-backed Woodpecker Only Report: 14 Sep Pennington JLB
Pileated Woodpecker All Reports: 18 Aug Roberts CA; 23 Aug Roberts MO; 28 Sep Roberts JSP; 28 Oct Roberts BJU; 14 Nov Grant and Roberts BJU
Merlin Early: 09 Aug Yankton RND; 17 Aug Bon Homme RSL, RND; 02 Sep Brown GO
Peregrine Falcon Early: 23 Aug Brown MO; 26 Aug Grant BJU; 26 Aug Pennington CLG; 19 Sep Charles Mix KP … Late: 20 Oct Sully RDO; 21 Sep Clay DS; 21 Sep Charles Mix KP; 15 Sep Minnehaha MRZ, DC, CA; 15 Sep Jones ND
Prairie Falcon Early: 16 Aug Charles Mix RM; 25 Aug Hughes RDO; 28 Sep Stanley DB; 17 Oct Deuel BJU
Olive-sided Flycatcher Early: 10 Aug Roberts MO; 24 Aug Hughes DB; 31 Aug Bon Homme RDO; 31 Aug Clay and Union CA, KP; 01 Sep Custer DS, JSP … Late: 08 Sep Hughes DB; 07 Sep Miner JSP; 04 Sep Roberts BJU; 04 Sep Pennington JLB
Western Wood-Pewee Late: 02 Sep Fall River DS, JSP; 01 Sep Harding DB; 31 Aug Lawrence SS
Eastern Wood-Pewee Late: **26 Sep Gregory RM;** 20 Sep Yankton RND; 19 Sep Charles Mix KP; 15 Sep Minnehaha MRZ, CA
Yellow-bellied Flycatcher All Reports: 08 Sep Union DS; 10 Sep Marshall GO; **14 Sep Kingsbury JSP**
Alder Flycatcher Only Report: **17 Aug Sanborn CA**
Willow Flycatcher Late: **21 Sep Charles Mix KP; 15 Sep Minnehaha MRZ, CA;** 10 Sep Day GO; 02 Aug Meade ND
Least Flycatcher Late: **25 Sep Brown BP;** 21 Sep Charles Mix KP; 15 Sep Minnehaha MRZ, CA; 08 Sep Meade RSL
Dusky Flycatcher All Reports: 02 Aug Custer DB; 02 Aug Meade ND
Cordilleran Flycatcher All Reports: 02 Aug Custer DB; 02 Aug Meade ND
Eastern Phoebe Late: **25 Oct Clay DS;** 12 Oct Lincoln JSP; 07 Oct Deuel BJU; 01 Sep Fall River SS
Say's Phoebe Late: 23 Sep Harding DB; 22 Sep Custer ND; 21 Sep Kingsbury JSP; 28 Aug Yankton RND
Great Crested Flycatcher Late: **25 Sep Stanley RDO;** 08 Sep Union DS; 08 Sep Hughes DB; 07 Sep Marshall BP
Western Kingbird Late: **22 Sep Fall River ND;** 19 Sep Charles Mix KP; 08 Sep Hughes DB; 04 Sep Roberts and Grant BJU
Eastern Kingbird Late: **27 Sep Charles Mix RM; 22 Sep Turner KP;** 21 Sep Douglas KP; 14 Sep Jackson and Haakon ND
Loggerhead Shrike Late: **21 Sep Charles Mix KP;** 10 Sep Day GO; 09 Sep Custer MMM
Northern Shrike Early: 13 Oct Aurora CA, KP; 17 Oct Meade ND; 18 Oct Hutchinson KP; 26 Oct Sully DB

Bell's Vireo Late: **20 Sep Hughes EDS;** 07 Sep Douglas KP; 31 Aug Bon Homme RDO; 18 Aug Pennington RSL
Yellow-throated Vireo Late: 09 Sep Hughes DB; 07 Sep Day BP; 02 Sep Union RND
Plumbeous Vireo All Reports: 02 Aug Custer DB; 10 Aug Custer SS; 01 Sep Custer DS, JSP; 06 Sep Pennington JLB
Blue-headed Vireo Early: 23 Aug Marshall MO; 31 Aug Union CA, KP; 01 Sep Roberts MO … Late: **08 Oct Hughes DB;** 21 Sep Lake JSP; 19 Sep Brown GO
Warbling Vireo Late: 19 Sep Brown GO; 15 Sep Hughes DB; 15 Sep Clay GJS; 06 Sep Pennington JLB
Philadelphia Vireo Early: 28 Aug Stanley SS; 31 Aug Union CA, KP; 01 Sep Minnehaha CA; 01 Sep Roberts MO … Late: 26 Sep Walworth DB; 04 Sep Roberts BJU
Red-eyed Vireo Late: 25 Sep Edmunds GO; 25 Sep Clay GJS; 21 Sep Charles Mix KP; 07 Sep Pennington ND
Gray Jay All Reports: 12 Aug Lawrence SS; 14 Sep Pennington JLB; 08 Oct Pennington ND; 09 Nov Meade EEM; 19 Nov Pennington ND
Pinyon Jay Only Report: 31 Aug Fall River DS, JSP
Clark's Nutcracker All Reports: 01 Aug Pennington JLB; 31 Aug Custer DS, JSP; 02 Sep Pennington JLB, ND
Black-billed Magpie reported 08 Nov Lyman RDO
Purple Martin Late: 21 Aug Yankton RND; 19 Aug Douglas KP; 17 Aug Brookings JSP
Tree Swallow Late: 07 Oct Deuel BJU; 05 Oct Lincoln CA; 05 Oct Day BP; 05 Oct Charles Mix KP; 23 Aug Jackson ND
Violet-green Swallow All Reports: 02 Aug Custer DB; 10 Aug Custer SS; 12 Aug Lawrence SS
Northern Rough-winged Swallow Late: 15 Sep Charles Mix RM; 08 Sep Yankton RND; 04 Sep Roberts BJU; 02 Sep Pennington CLG
Bank Swallow Late: 21 Sep Brookings JSP; 15 Sep Minnehaha MRZ, CA; 14 Sep Kingsbury JSP; 02 Sep Meade EEM; 31 Aug Clay KP, CA
Cliff Swallow Late: **27 Sep Charles Mix RM;** 18 Sep Stanley RDO; 15 Sep Minnehaha MRZ, CA; 11 Aug Harding CEM
Barn Swallow Late: **26 Oct Lake JSP;** 11 Oct Brown BP; 09 Oct Charles Mix RM; 03 Oct Pennington JLB
Red-breasted Nuthatch Early: 02 Aug Minnehaha CA; 09 Aug Brown GO; 12 Aug Lake JSP
Brown Creeper Early: **10 Aug Hughes DB;** 17 Oct Deuel BJU; 19 Oct Brookings JSP
Rock Wren Only Report: 01 Sep Harding DB
Canyon Wren Only Report: 31 Aug Custer DS, JSP
House Wren Late: 10 Oct Edmunds GO; 09 Oct Hughes DB; 09 Oct Charles Mix KP; 02 Sep Pennington ND; 02 Sep Fall River DS, JSP
Winter Wren All Reports: 13 Oct Meade EEM; 17 Oct Codington BJU; 28 Oct Roberts BJU; 30 Oct Hughes DB; 09 Nov Hughes JLB; 24 Nov Hughes KM
Sedge Wren Late: 15 Oct Clay DS; 10 Oct Hughes KM; 27 Sep Roberts MO; 16 Aug Pennington JLB
Marsh Wren Late: 09 Nov Lawrence EK; 27 Oct Charles Mix KP; 19 Oct Lake JSP
American Dipper Only Report: 20 Oct Lawrence EK
Golden-crowned Kinglet Early: 07 Oct Deuel and Grant BJU; 17 Oct Codington BJU; 20 Oct Hughes DB; 23 Oct Perkins ND
Ruby-crowned Kinglet Early: 27 Aug Brown GO; 01 Sep Roberts MO; 08 Sep Hughes DB … Late: 01 Nov Stanley DB; 30 Oct Douglas KP; 28 Oct Grant BJU; 30 Sep Perkins ND
Blue-gray Gnatcatcher All Reports: 01 Aug Yankton RND; 28 Aug Stanley DB; 31 Aug Union CA, KP; 01 Sep Custer DS, JSP; 08 Sep Union DS
Eastern Bluebird Late: 27 Nov Deuel BJU; 17 Nov Yankton KP; 11 Nov Hughes DB; 23 Oct Perkins ND
Mountain Bluebird Late: 12 Oct Meade EEM; 08 Oct Custer ND; 24 Sep Lawrence ND; 04 Aug Charles Mix RM
Townsend's Solitaire Early: 30 Sep Perkins ND; 07 Oct Stanley DB; 19 Oct Haakon ND; 25 Oct Edmunds GO
Veery All Reports: 23 Aug Roberts MO; 01 Sep Union RDO; 03 Sep Marshall GO
Swainson's Thrush Early: 26 Aug Grant BJU; 02 Sep Brown GO; 04 Sep Roberts BJU; 05 Sep Hughes DB … Late: 08 Oct Hughes DB; 07 Oct Brown GO; 25 Sep Lake JSP; 23 Sep Harding DB
Hermit Thrush Early: 07 Oct Deuel and Grant BJU; 12 Oct Minnehaha JSP … Late: 21 Oct Brown GO; 19 Oct Day RND; 17 Oct Deuel and Codington BJU
Wood Thrush All Reports: 08 Sep Stanley RDO; **15 Sep Clay GJS**
Gray Catbird Late: 02 Oct Stanley RDO; 02 Oct Pennington OCW; 01 Oct Clay GJS; 01 Oct Brown GO
Brown Thrasher Late: 06 Oct Hughes KM; 02 Oct Pennington OCW; 30 Sep Brown BP
American Pipit Early: 13 Sep Clay DS; 14 Sep Kingsbury JSP; 22 Sep Hughes RDO; 30 Sep Meade SS … Late: **14 Nov Perkins ND;** 03 Nov Charles Mix RM; 02 Nov Minnehaha JSP; 02 Nov Butte JLB
Bohemian Waxwing Early: 02 Nov Sully KM; 07 Nov Edmunds GO; 10 Nov Hughes CA, KP, MRZ
Ovenbird Late: 28 Sep Hughes DB; 24 Sep Brown GO; 10 Sep Day GO; 01 Sep Pennington JLB; 01 Sep Custer DS, JSP
Northern Waterthrush Early: **10 Aug Lincoln CA, MRZ;** 17 Aug Brookings JSP; 17 Aug Sanborn CA; 08 Sep Hughes RDO … Late: **07 Oct Deuel BJU;** 18 Sep Charles Mix RM; 15 Sep Minnehaha MRZ, CA
Golden-winged Warbler All Reports: 01 Sep Roberts MO; 03 Sep Marshall GO

Black-and-white Warbler Early: 18 Aug Gregory KP; 23 Aug Marshall and Roberts MO; 04 Sep Pennington JLB … Late: 19 Sep Lake JSP; 15 Sep Hughes DB; 13 Sep Clay GJS
Tennessee Warbler Early: 01 Sep Roberts MO; 01 Sep Union RDO; 03 Sep Clay GJS; 03 Sep Marshall GO; 15 Sep Mellette ND … Late: 05 Oct Brown BP; 25 Sep Edmunds GO; 12 Sep Charles Mix RM
Orange-crowned Warbler Early: 11 Sep Brown GO; 12 Sep Hughes EDS; 14 Sep Kingsbury JSP; 14 Sep Stanley RDO, RSL; 15 Sep Mellette ND … Late: 19 Oct Hughes KM; 12 Oct Stanley RDO; 12 Oct Minnehaha JSP; 10 Oct Pennington OCW
Nashville Warbler Early: 23 Aug Marshall MO; 26 Aug Grant BJU; 31 Aug Hughes JLB, RSL … Late: 10 Oct Edmunds GO; 05 Oct Brown BP; 29 Sep Codington JSP; 28 Sep Hughes DB; 28 Sep Clay GJS
Virginia's Warbler Only Report: **01 Sep Custer DS, JSP**
Connecticut Warbler Only Report: **08 Sep Hughes RDO**
MacGillivray's Warbler All Reports: 02 Aug Custer DB; 10 Aug Custer SS; 31 Aug Custer DS, JSP; 01 Sep Custer DS, JSP
Mourning Warbler Early: 23 Aug Roberts MO; 26 Aug Grant BJU; 04 Sep Deuel BJU; 08 Sep Union DS … Late: 15 Sep Minnehaha MRZ, CA
Common Yellowthroat Late: 09 Oct Hughes EDS; 06 Oct Lincoln AH; 30 Sep Pennington CLG
American Redstart Late: 25 Sep Clay GJS; 15 Sep Minnehaha MRZ, CA; 15 Sep Hughes DB; 08 Sep Meade RSL
Northern Parula Only Report: 04 Sep Deuel BJU
Magnolia Warbler Early: 23 Aug Roberts MO; 31 Aug Union CA, KP; 04 Sep Grant BJU … Late: 25 Sep Edmunds GO; 10 Sep Day GO; 04 Sep Roberts BJU
Bay-breasted Warbler All Reports: 04 Sep Deuel BJU; 11 Sep Brown GO
Blackburnian Warbler Early: 23 Aug Marshall and Roberts MO; 02 Sep Brown BP, GO; 05 Sep Stanley RDO … Late: 04 Sep Roberts and Deuel BJU
Yellow Warbler Late: 02 Oct Stanley RDO; 16 Sep Lawrence SS; 15 Sep Hughes DB; 12 Sep Edmunds GO
Chestnut-sided Warbler Early: 28 Aug Clay GJS; 31 Aug Union CA, KP; 01 Sep Minnehaha CA … Late: 27 Sep Hughes EDS; 15 Sep Minnehaha MRZ, CA; 05 Sep Stanley KM
Blackpoll Warbler All Reports: 04 Sep Deuel BJU; 11 Sep Brown GO; 15 Sep Minnehaha CA, DC, MRZ
Black-throated Blue Warbler All Reports: 22 Sep Edmunds JDW; 22 Sep Stanley RDO; 29 Sep Hughes DB
Palm Warbler All Reports: 29 Sep Hughes DB; 06 Oct Lake JSP; 07 Oct Deuel BJU
Pine Warbler Only Report: **15 Sep Minnehaha MRZ**
Yellow-rumped Warbler Early: 11 Sep Brown GO; 14 Sep Kingsbury JSP; 15 Sep Minnehaha CA, MRZ; 16 Sep Hughes DB … Late: 30 Nov Charles Mix SS, KP; 23 Nov McCook CA; 17 Nov Yankton KP; 06 Oct Custer MMM
Black-throated Green Warbler Early: 01 Sep Minnehaha CA; 04 Sep Deuel BJU; 08 Sep Hughes DB … Late: 07 Oct Brown GO, BP; 24 Sep Stanley RDO; 15 Sep Minnehaha MRZ, CA
Canada Warbler Early: 23 Aug Marshall and Roberts MO; 01 Sep Minnehaha CA; 01 Sep Union RDO … Late: 09 Sep Charles Mix RM; 08 Sep Union DS; 08 Sep Hughes DB; 04 Sep Roberts, Grant, and Deuel BJU
Wilson's Warbler Early: 22 Aug Lake JSP; 23 Aug Clay GJS; 23 Aug Roberts MO; 30 Aug Harding DB … Late: 07 Oct Hughes DB; 30 Sep Clay GJS; 24 Sep Lawrence ND; 15 Sep Minnehaha MRZ, CA
Yellow-breasted Chat Late: **28 Sep Hughes KM;** 03 Sep Stanley RDO, KM; 02 Sep Fall River DS, JSP
Scarlet Tanager Late: 07 Sep Marshall BP; 04 Sep Deuel BJU; 01 Sep Roberts MO; 31 Aug Union KP, CA
Western Tanager Late: 04 Sep Pennington JLB; 02 Sep Fall River DS, JSP; 01 Sep Custer DS, JSP
Spotted Towhee Late: 02 Nov Lake JSP; 19 Oct Stanley RDO; 19 Oct Hughes KM; 06 Oct Pennington RSL; 06 Oct Custer MMM
Eastern Towhee Late: 09 Oct Stanley RDO; 11 Sep Minnehaha CA; 02 Sep Union RND
American Tree Sparrow Early: 16 Oct Hughes DB; 17 Oct Codington BJU; 19 Oct Day RND; 19 Oct Lincoln MRZ; 19 Oct Pennington ND
Chipping Sparrow Late: **16 Nov Hughes KM;** 26 Oct Kingsbury JSP; 23 Oct Douglas KP; 08 Oct Custer ND
Clay-colored Sparrow Late: **20 Oct Lincoln AH;** 15 Oct Hughes KM; 06 Oct Stanley DB; 30 Sep Perkins ND; 30 Sep Meade SS
Field Sparrow Late: 17 Oct Hughes DB; 14 Oct Custer MMM; 12 Oct Lincoln JSP
Vesper Sparrow Late: 03 Nov Custer MMM; 20 Oct Douglas KP; 19 Oct Lincoln MRZ; 15 Oct Hughes KM
Lark Sparrow Late: 14 Sep Jackson ND; 11 Sep Mellette SS; 02 Sep Fall River DS, JSP; 28 Aug Yankton RND; 21 Aug Douglas KP; 21 Aug Brown BP
Lark Bunting Late: 15 Sep Jones ND; 14 Sep Jackson ND; 01 Sep Harding DB; 03 Aug Sully RDO
Savannah Sparrow Late: 26 Oct Kingsbury JSP; 19 Oct Lake JSP; 19 Oct Deuel RND; 10 Oct Hughes KM; 30 Sep Perkins ND
Grasshopper Sparrow Late: 30 Sep Perkins ND; 19 Sep Charles Mix KP; 15 Sep Mellette ND; 24 Aug Douglas ND
Le Conte's Sparrow Early: 24 Sep Minnehaha CA; 27 Sep Roberts MO; 29 Sep Hughes RDO … Late: 10 Oct Hughes KM; 07 Oct Lincoln CA; 07 Oct Grant BJU
Nelson's Sparrow Late: **10 Oct Hughes KM;** 07 Oct Lincoln CA; 07 Oct Grant BJU

Fox Sparrow Early: 07 Oct Deuel and Grant BJU; 07 Oct Stanley DB … Late: 16 Nov Clay DS; 11 Nov Hughes DB; 07 Nov Edmunds GO
Song Sparrow Late: 24 Nov Hughes KM; 14 Nov Pennington OCW; 14 Nov Grant BJU
Lincoln's Sparrow Early: 03 Sep Hughes DB; 10 Sep Day GO; 11 Sep Brown GO; 11 Sep Mellette SS … Late: **17 Nov Hughes KM;** 02 Nov Hutchinson KP; 17 Oct Deuel BJU; 08 Oct Custer ND
Swamp Sparrow Late: 24 Nov Yankton RND; 19 Oct Hughes KM; 13 Oct Lincoln AH
White-throated Sparrow Early: 14 Sep Lincoln AH; 15 Sep Minnehaha CA, MRZ; 18 Sep Brown GO; 19 Sep Charles Mix KP; 20 Sep Harding KM … Late: 30 Nov Hughes KM; 24 Nov Yankton RND; 22 Nov Clay GJS; 16 Nov Lake JSP
Harris's Sparrow Early: 18 Sep Brown GO; 19 Sep Charles Mix KP; 27 Sep Douglas KP; 05 Oct Lawrence SW … Late: 22 Nov Clay GJS; 17 Nov Brookings KCJ; 10 Nov Sully DB; 10 Nov Jones ND
White-crowned Sparrow Early: 16 Sep Lawrence SS; 17 Sep Hughes DB; 21 Sep Charles Mix KP; 27 Sep Roberts MO … Late: 21 Oct Brown GO; 20 Oct Hughes DB; 19 Oct Stanley RDO; 15 Oct Pennington RSL
Dark-eyed Junco Early: 01 Sep Hughes EDS; 24 Sep Brown GO; 30 Sep Douglas KP
Lapland Longspur Early: 17 Oct Codington and Deuel BJU; 20 Oct Sully RDO; 25 Oct Perkins ND
Smith's Longspur Only Report: 17 Oct Deuel BJU
Chestnut-collared Longspur All Reports: 03 Aug Hyde and Sully RDO; 11 Aug Hand, Hyde, and Sully RDO
Snow Bunting Early: 17 Oct Codington BJU; 24 Oct Brown GO; 28 Oct Grant and Roberts BJU; 02 Nov Butte JLB; 09 Nov Stanley CA, RDO
Northern Cardinal reported 01 Aug Pennington JLB, RSL; 17 Aug Pennington JLB
Rose-breasted Grosbeak Late: 15 Sep Clay GJS; 07 Sep Roberts BP; 07 Sep Douglas KP
Black-headed Grosbeak Late: 01 Sep Fall River SS; 01 Sep Custer DS, JSP; 31 Aug Bon Homme RDO
Blue Grosbeak Late: 11 Sep Mellette SS; 04 Sep Gregory RM; 28 Aug Stanley DB; 21 Aug Douglas KP
Lazuli Bunting Late: **14 Sep Stanley RSL;** 11 Sep Mellette SS; 01 Sep Harding DB
Indigo Bunting Late: 28 Sep Roberts JSP; 16 Sep Hughes DB; 14 Sep Stanley RSL, RDO
Dickcissel Late: 03 Sep Stanley RDO; 02 Sep Yankton RND; 24 Aug Clay and Buffalo ND; 21 Aug Douglas KP; 15 Aug Mellette SS
Bobolink Late: 02 Sep Yankton RND; 26 Aug Grant BJU; 23 Aug Brown MO; 10 Aug Pennington RSL
Western Meadowlark Late: 27 Nov Deuel BJU; 13 Nov Hughes SS; 10 Nov Brule RND; 03 Nov Custer MMM
Yellow-headed Blackbird Late: 01 Nov Grant BJU; 20 Oct Sully RDO; 17 Oct Deuel BJU; 30 Sep Perkins ND
Rusty Blackbird Early: 17 Oct Codington and Deuel BJU; 19 Oct Grant RND; 23 Oct Perkins ND; 27 Oct Charles Mix KP; 27 Oct Yankton RND … Late: 27 Nov Deuel BJU; 22 Nov Yankton RND; 16 Nov Turner KP; 16 Nov Faulk MMM; 16 Nov Brookings JSP; 03 Nov Harding ND
Brewer's Blackbird Late: 16 Nov Turner KP; 11 Nov Edmunds ND; 06 Nov Marshall and Brown GO; 27 Oct Charles Mix KP; 13 Oct Pennington JLB
Common Grackle Late: 27 Nov Grant, Deuel, and Codington BJU; 02 Nov Buffalo RSL; 29 Oct Meade EEM
Brown-headed Cowbird Late: 11 Nov Kingsbury JSP; 28 Oct Grant BJU; 19 Oct Deuel RND; 17 Oct Charles Mix RM; 15 Aug Mellette SS
Orchard Oriole Late: **15 Sep Jackson ND;** 10 Sep Clay GJS; 08 Sep Butte SS; 21 Aug Douglas KP
Bullock's Oriole All Reports: 31 Aug Stanley RSL; **04 Sep Pennington JLB**
Baltimore Oriole Late: **21 Sep Stanley RDO; 17 Sep Minnehaha MRZ;** 15 Sep Clay GJS; 17 Aug Fall River ND
Gray-crowned Rosy Finch Only Report: 24 Nov Meade MMM
Purple Finch Early: 12 Oct Lincoln JSP; 22 Oct Minnehaha MRZ; 28 Oct Edmunds GO; 16 Nov Sully DB
Red Crossbill Early: 27 Nov Deuel BJU; 29 Nov Tripp ND
Pine Siskin All Reports: 01 Aug Pennington JLB; 02 Aug Custer DB; 23 Oct Harding ND; 27 Nov Codington and Deuel BJU
Lesser Goldfinch All Reports: 31 Aug Fall River DS, JSP; 01 Sep Fall River SS; 02 Sep Fall River DS, JSP; 06 Sep Pennington JLB, ND; **15 Sep Pennington APB**

Reports Requiring Acceptance By The Rare Bird Records Committee
Black Scoter 16 Oct Pennington JLB; 20 Nov Butte ND
Barrow's Goldeneye 14 Nov Grant BJU
Neotropic Cormorant 22 Aug Brule SS; 24 Aug Brule RND
Red-shouldered Hawk 18 Oct Charles Mix RM
Broad-winged Hawk 09 Nov Stanley RSL
Common Gallinule 12 Oct Minnehaha DC, MRZ
Snowy Plover 02 Sep Clay RND
Red Phalarope 21-24 Aug Brule KP, SS, DC, JSP, RND; 22 Aug Douglas KP
Thayer's Gull 06 Nov Grant BJU
Lesser Black-backed Gull 17 Oct Deuel BJU
Great Black-backed Gull 01-17 Nov Stanley and Hughes KM, RDO, DB; 06 Nov Roberts BJU; 23 Nov Lyman DB, RDO, JSP

White-winged Dove 04 Sep Grant BJU
Anna's Hummingbird 02-14 Aug Meade ND, SS, RSL; 28 Aug – 30 Sep Pennington RSL, JLB, RDO; 16 Oct – 03 Nov Charles Mix RM, KP, BFH
Orange-crowned Warbler 01 Aug Yankton RND
Hooded Warbler 28 Aug Stanley RDO
Lark Sparrow 16 Nov Yankton RND
Purple Finch 24-26 Oct Pennington APB

Species Expected But Not Reported
Ruffed Grouse (3), Greater Sage-Grouse, Northern Bobwhite, Little Blue Heron (3), Glossy Ibis (2), Black-necked Stilt, Whimbrel (4), Ruddy Turnstone, Black-legged Kittiwake, Little Gull, Mew Gull, Iceland Gull, Barn Owl, Barred Owl, American Three-toed Woodpecker, Gyrfalcon, Scissor-tailed Flycatcher (3), Pygmy Nuthatch (2), Carolina Wren, Gray-cheeked Thrush, Varied Thrush, Northern Mockingbird, Sprague's Pipit, Blue-winged Warbler, Cape May Warbler, Brewer's Sparrow, Baird's Sparrow (2), Great-tailed Grackle, Cassin's Finch (2), White-winged Crossbill, Common Redpoll, Evening Grosbeak

Contributing Observers

CA	Chris Anderson	EEM	Ernest E. Miller
DB	Doug Backlund	KM	Kenny Miller
JLB	Jocelyn L. Baker	GO	Gary Olson
KB	Kristel Bakker	RDO	Ricky D. Olson
APB	Addison & Patricia Ball	MO	Mark Otnes
DC	Douglas Chapman	JSP	Jeffrey S. Palmer
RND	Roger N. Dietrich	BP	Barry Parkin
ND	Nancy Drilling	KP	Kelly M. Preheim
CLG	Canyon Lake Group	GJS	Gary & Jan Small
AH	Alice Hill	SS	Scott Stolz
BFH	Bill F. Huser	EDS	Eileen D. Stukel
KCJ	Kent C. Jensen	OCW	Outdoor Campus West Survey
JK	Joyce Kringen	DS	David Swanson
EK	Elizabeth Krueger	BJU	Bill J. Unzen
RSL	Richard S. Latuchie	SW	Scott Weins
RM	Ron Mabie	JDW	J. David Williams
MMM	Michael M. Melius	MRZ	Mick R. Zerr
CEM	Charles E. Miller		

Virginia Rail at Dr. Weyers' office, Kiwanis Avenue at 49th St., Sioux Falls. 4/15/2009
Photo: Douglas Chapman

While browsing through a favorite website about bird families of the world last summer, I found this unpublished paper on-line. The author is an extremely well-travelled and much published scientist/zooligist/ornithologist and more.

Dr. Dinets' contention is, at the very least, thought-provoking. I thought that running this in SD Bird Notes *could perhaps inspire some discussion on the classification of birds–ancient and/or modern. I thank him for updating it and granting permission to let us publish this paper.*

WHY AVIAN SYSTEMATICS ARE NO LONGER SCIENTIFIC

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FOREWORD

In the late 19th and early 20th centuries, insect collecting (especially butterfly collecting) was almost as popular as birdwatching is today. A German company, Staudinger, came to dominate the commercial trade in insect specimens, and, eventually, in literature on the subject. Soon, its field guides and overview books became the main authority on systematics of Lepidoptera. To please the army of amateur collectors, its authors merged many difficult-to-identify species of Geometridae and other small moths, while splitting virtually every individual variation of large butterflies into a separate species. It took decades to correct those errors, and a few of them still linger, since some groups have never been revised.

The present-day situation in avian systematics is similar, except the tendency is only to oversplit, and more than one mechanism is at work. Below is a brief overview of those mechanisms.

1. SPECIES LEVEL

1.1 Birdwatching bias

There are probably hundreds of birdwatchers in the world for every professional ornithologist today, and the two categories increasingly mix. It's almost impossible to find a professional who doesn't maintain a life list. Since everybody wants to have a long life list, a strong bias towards splitting easy-to-see species exists. "Splitting" papers are immediately recognized without necessary skepticism, while "lumping" papers are often ignored. It's been conclusively shown years ago that Northern Parula is a subspecies of Tropical Parula, and not the most distinct one. I have yet to see it reflected in any checklist or field guide. However, splitting of Bicknell's Thrush was immediately incorporated everywhere, even though there is substantial controversy concerning its validity.

Some species in early stages of diverging exist as a number of distinct populations with a complicated pattern of clinal variation and hybridization zones. If typical birds from these populations are easy to distinguish in the field, the whole system is likely to be split into a number of species simply because any other way of classifying it would be difficult to understand and describe in field guides. This has happened, for example, to some gulls and wagtails.

It's not just the birders: the mass media is also at fault. Any proposed split receives an inordinate amount of media attention. Some very controversial splitting proposals have recently made it into "most-read" news lists on BBC and CNN websites under titles like "An amazing new species discovered in...". I have yet to see any lumping proposal ever mentioned in popular media. In our times, when "secondary criteria" such as media coverage are routinely taken into account, for example in evaluating tenure candidacies, even the most honest researcher is hard pressed to interpret the results of his work as justifying

splitting rather than lumping.

1.2 Species concept bias
PSC (Phylogenetic Species Concept) is a poorly formulated species concept that essentially allows re-naming of any subspecies, race, ecomorph, or geographically separated population as a full species. PSC species descriptions are non-falsifiable and so have nothing to do with science. No wonder many experts have never accepted PSC, and recently it's been increasingly recognized as fraudulent. However, many recent papers propose PSC splits either openly or while claiming them to be BSC (Biological Species Concept) splits. This applies to many, if not all, recent splits of Cabo Verde taxa, many Brazilian splits, and many Wallacea splits, among others.

An even worse invention is CSC (Conservation Species Concept), the idea that "upgrading" local populations to full species status somehow aids in their conservation. This idea has been repeatedly shown to be extremely detrimental for conservation, in part because the anti-conservation people are not all illiterate idiots and can challenge the status of poorly substantiated taxa (as in the case of one jumping mouse subspecies in the US), and in part because it erodes the public trust in scientific justification for various Red Data Books, CITES lists and other documents. However, CSC is still around and is often used to boost splitting proposals. Recent examples include many splits of Sunda Islands taxa, refusals to accept lumping of certain woodhopoe "species" despite the overwhelming evidence that they are merely color morphs, and the proposed splitting of San Joaquin Valley (California) population of Le Conte's Thrasher into a new subspecies with no supporting evidence at all.

Of course, in some cases new splits are proposed simply in hope of obtaining financing for research, or for other obvious personal reasons. I suggest unifying PSC, CSC, and other pseudo-scientific approaches to species-level taxonomy under the name RISC (Resume-Improving Species Concept). This name better reflects their primary function and scientific merit.

1.3 Single-character splits
Recently, many proposed splits were based exclusively on differences in vocalizations. In some groups, such differences are usually genetic and might carry certain taxonomic importance, but there is usually no proof that they lead to reproductive isolation or are caused by anything more substantial than a single-allele change. A large number of such splits have been recommended (and instantly accepted) for Strigidae, Troglodytidae and many Neotropic suboscines. Splits based entirely on simple differences in plumage pigmentation are also popular (Araripe Manakin is a good example).

Another flawed approach is splitting species based solely on differences in chromosomal number or, more recently, in mtDNA. This is wrong for a number of reasons. Even a single hybridization event in the distant past, no matter how insignificant for the species' phenotype and evolution, can alter mtDNA of a subset of the population and make it ripe for frivolous splitting. Also, many species have already been found to have variable chromosome numbers, and such variation does not necessarily prevent interbreeding, so its taxonomic importance should not be automatically assumed.

Yet another fashionable trend is splitting allopatric or parapatric populations based solely on "differences in habitat preferences", which usually means that in the different geographical areas that they inhabit there are some differences in habitats available for them.

Generally speaking, it's always bad science to split a species based on just one criterion. A good split should be based on analyzing all possible evidence: mitochondrial and nuclear DNA, caryotype, morphology and behavior. And it is important to obtain data from the

entire range of the species, not just two points. Recently, a "new species" of tailorbird was split off in Cambodia; the authors didn't compare its genetics with those of Cambodian tailorbirds of the "old" species, but instead compared them with those of birds from Indonesia. They still found very little difference, but went ahead with submitting the paper anyway, and, of course, it was accepted and published.

2. GENUS LEVEL

2.1 Lost perspective splits

The amount of ongoing splitting in any major taxon is proportional to the amount of research focused on it. Birds are the best-studied large group of organisms, so they are oversplit relative to almost all other major taxon. The way this mechanism works on genus level is usually the following. An expert begins to study a certain genus in detail. It soon becomes apparent that one distinct species or species group is a sister taxa to all others (which is usually the case for any genus). The expert proposes splitting it into a new genus. Since he is the leading (and often the only) expert on that particular group, his proposal is immediately accepted. But in the remaining genus, there is again one species (or species group) which is more distinct than others. If unchecked, this chain reaction can continue until each species is in its own genus. This has been going on for decades in hummingbird and duck taxonomy and is now happening with gulls, sunbirds and tits, among other groups. Bringing the whole thing back to general standards requires a major revision, a certain determination and the authority of one of the most-respected experts in the field... but such experts usually have better things to do.

2.2 Shape splits

Theoretically, all characters should be considered taxonomically equal unless proven otherwise. In practice, some are more equal than others. In mammalogy, differences in skull and especially teeth structure have traditionally been assigned too much taxonomic importance. In ornithology, too much attention is given to bill shape and size. It's been repeatedly shown that the size and shape of the bill can change much faster than any other characters, sometimes within a single-digit number of generations. Still, in many cases differences in bill shape are automatically considered sufficient for splitting genera. Good examples include flamingos, Spoon-billed Sandpiper, and hummingbirds.

2.3 Trojan horse splits

Cladistics insist that all taxa must be monophyletic. Recent advances in molecular systematics have shown that many large genera are paraphyletic in respect to some so-called aberrant species or groups of species. Considering how oversplit the whole thing is, the natural course of action would be to include those weird-looking taxa into the larger genera. Never happens. Virtually all remaining large genera have either been split already (*Francolinus, Sterna, Columba,* and many others) or are about to be split (*Larus, Turdus, Zoothera,* etc.) In many cases, this is a two-step maneuver: first, one species is declared a separate genus, then it is "noticed" that the rest has become paraphyletic. That's what was done with Anas by initially splitting *Marmaronetta*.

In other cases, genetic data which goes contrary to common sense and should be checked and re-checked, is admitted without scrutiny as long as it can be used as an excuse for splitting. Recent suggestion that *Parus* (one of the few remaining genera that are well-defined and encompass a natural group) is paraphyletic in respect to Tibetan Ground-Jay was immediately used to split the former. It almost feels like there is some kind of splitting conspiracy.

3. HIGHER LEVELS

Birds have been considered a separate class since the first Ancient Greek classification systems; they are even mentioned as such in the Book of Genesis. However, they are a very

uniform group. Even the difference between the most extreme members of Aves (Ostrich and a hummingbird, for example) is much smaller than between a gecko and a legless lizard. Still, lizards are considered a suborder, while birds are divided into a large number of orders, some so similar that their members are difficult to tell apart even in hand (I have yet to see a birder who wouldn't sometimes mistake a honeyguide for a passerine). Because the system of dividing birds into orders is so poorly substantiated, it has always been riddled with controversies, and is widely ignored in checklists and field guides. A much more logical, convenient, and scientifically sound approach would be to consider birds an order in class Archosauria. Which, incidentally, is what cladisitics tell us to do.

The same problems exist within orders, especially in passerines. It is immediately obvious to any outside observer that the passerines are a very uniform group, best treated as a single family with six subfamilies (oscine passerines being one of them). However, just the oscines are now split into 80-100 families, and the number keeps growing. Dozens of genera are clearly intermediate between the traditional families, cannot be fitted neatly into any such classification, and inevitably end up being proclaimed to be separate families. In absence of any attempts at balanced approach, this runaway frenzy has resulted in the levels of oversplitting not seen in systematics for many decades.

In my personal life list I recognize 64 extant bird families (still haven't seen a kiwi in the wild, that's the only family left). I could provide detailed justification for this particular number, but it would be outside the scope of this essay. And, in case anyone is interested, there are only 9716 species on that list, of which I'm yet to see 1764. Of course, 9716 is a lot less than in all other current checklists, but I don't feel like I have a shortage of interesting birds to look for.

Conclusion

Combined, all the problems mentioned above not only make Aves oversplit on all levels, they render the whole system increasingly useless. Even assuming that at least some of these trends are temporary, and strict scientific standards will again be applied to bird classification, it would take a lot of time and effort to repair the damage.

There is always a tendency to oversplit, in part because researchers love their study subjects and enjoy having long publications lists. People use all kinds of gimmicks to do it, intentionally or not. I haven't even mentioned some less honest approaches, such as splitting species in non-peer-reviewed books (*Handbook of the Birds of the World* is an infamous example) or in quasi-scientific journals owned by the author of the split or by his organization. Unless this tendency is checked by editorial scrutiny and healthy skepticism, the splitfest will continue until the systematics become absolutely meaningless and misleading, just like has already happened in primatology.

Nowadays there is a growing movement for getting rid of rank-based taxonomy altogether; ranks are criticized as being arbitrary and incomparable between major groups of organisms. The proposed alternatives have certain advantages (along with some disadvantages) and might eventually prevail. But most of their proponents still believe that the distinction between species and subspecific taxa is biologically important and should be reflected in taxonomy. Besides, ranks are widely (even if not always correctly) used in studies of biodiversity and evolutionary history, as well as in setting conservation priorities and other practical applications. So rank-based systematics are not just a fun game for taxonomists and amateur naturalists. It would be a pity if this whole area of scientific inquiry falls apart simply because there's nobody to protect it.

Acknowledgements

This essay was originally written in 2006 as a pamphlet not intended for a scientific journal. I thank Darren Naish and all commenters of his Tetrapod Zoology blog for fascinating discussions that helped me in editing and updating it for present publication.

BIRD FEEDING STATIONS AT SOUTH DAKOTA STATE PARKS

Recently an SDOU member contacted me with a problem. They were told they could not keep their bird feeders up at a state park. They asked if I could help them get the authority to put them back up. This problem has arisen a few times lately, so I decided it was time to contact South Dakota State Parks to see if we could help them set up a protocol to enable people to put up feeders at South Dakota State Parks.

I contacted Robert Schneider with South Dakota Game, Fish & Parks (GF&P). I stated that I was the current President of the (SDOU) South Dakota Ornithologists' Union. I informed him that one of SDOU's missions is to promote the study of birds in South Dakota. I stated people counting the birds at bird feeders play an important role in collecting data for such scientific projects as Audubon's Christmas Bird Count and Audubon/Cornell University's Great Backyard Bird Count in February and entry into the SDOU Online database.

Mr. Schneider replied that GF&P was having a meeting in January and this topic would be brought up. He was sure that could be worked out

After the meeting Mr. Schneider sent me the following:

> *"Our State Park Operations Team met in January and agreed on a common protocol for responding to requests and facilitating bird feeder stations in state park areas. The protocol is as follows:*
>
> - *The bird club member or volunteer should contact the park manager annually for permission to place feeder(s).*
> - *The park manager will determine where the feeder(s) may be placed within the park and when the feeder(s) may be installed and need to be removed.*
> - *The bird club or volunteer will be responsible for furnishing feed, filling and maintaining the feeder(s).*
>
> *We support the efforts of the SDOU and are glad that we can provide feeder sites to help meet your goals and mission. We welcome SDOU and local club participation in providing education programming in the parks. Hopefully relationships can be built that will result in recreation and education for the public. "*

This illustrates that with a little communication and cooperative efforts, good things can happen.

I also ask any SDOU members conducting field trips and like birding activities to contact the park manger prior to the event. This way they will know how much we really do visit our state parks. Also, it will alert park visitors who might wish to join a bird walk when and where the event will occur. This could lead to SDOU or your local bird club obtaining new members.

By the way, the person who contacted me has their feeders back up and has a good working relationship with the park manager now. Ricky D. Olson PO BOX 622 Ft Pierre SD 57532.

Figure 2. Turkey Vulture nest site in Butte County. A) Row of 1940s era sedans (arrow indicates vehicle with vulture nest from 2007–2012); B) Chevrolet Fleetmaster (arrow indicates location of vulture nest in vehicle's luggage compartment); C) Two vulture eggs on 31 May 2007; D) Vulture egg on 30 May 2008 (egg was unusually elongated with a blunt end; the second egg is not pictured but was broken); E) Adult vulture on nest on 4 June 2010; F) Vulture chick (about six days old) on 4 June 2010; G) Adult vulture on nest on 31 May 2011; H) Two vulture eggs on 31 May 2012. (Photo Credits: L. D. Igl, USGS).

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